

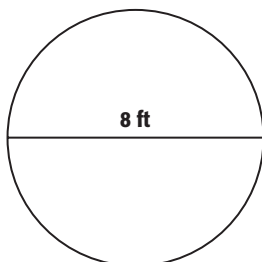
Section Overview

Perimeter and Circumference

Lessons 10-1, 10-2

Why? Finding the perimeter or circumference of a figure arises in real-world situations.

The sum of the side lengths of a polygon is the **perimeter**. The distance around a circle is called the **circumference**.



$$C = \pi d$$

$$C \approx 3.14 \cdot 8$$

$$C \approx 25.12$$

The circumference is about 25.12 feet.



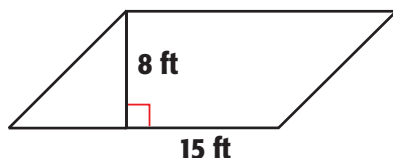
The formula for the **perimeter of a rectangle** is $P = 2w + 2\ell$.

Area

Lessons 10-3 through 10-6

Why? Finding the areas of figures arises in real-world situations.

Parallelogram

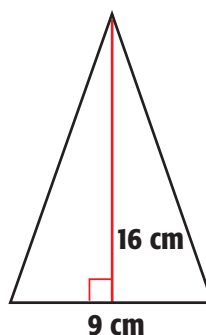


$$A = bh$$

$$A = (15)(8)$$

$$A = 120 \text{ ft}^2$$

Triangle

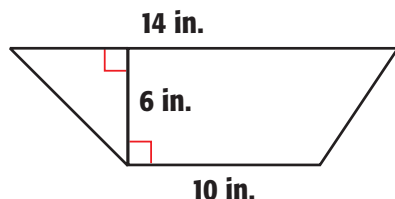


$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(9)(16)$$

$$A = 72 \text{ cm}^2$$

Trapezoid



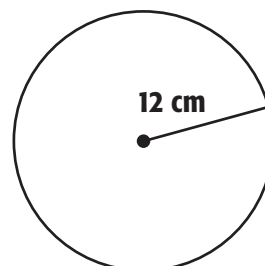
$$A = \frac{1}{2}h(b_1 + b_2)$$

$$A = \frac{1}{2}(6)(10 + 14)$$

$$A = \frac{1}{2}(6)(24)$$

$$A = 72 \text{ in}^2$$

Circle



$$A = \pi r^2$$

$$A \approx 3.14(12)^2$$

$$A \approx 3.14(144)$$

$$A \approx 452.16 \text{ cm}^2$$